Panel Proposal

Title:
"Colonial Sciences in Japan's Great East Asian Co-Prosperity Sphere", in honor of Professor Shigeru Nakayama

Organizer:
Togo Tsukahara (Kobe Univ., Japan, byz06433@nifty.com)

Co-organizers:
Prof. Yasushi Kakihara (Tokyo University of Marine Sciences, ykakihar@kaiyodai.ac.jp),
Dr. Kim Boumsoung (Tokyo Univ. boumsoung@gmail.com)
and Prof. Dr. Akihisa Setoguchi (Osaka Municipal Univ. asetoguchi@gmail.com)

Discussants and Commenters:
Prof. Dr. Iijima Wataru (Aoyama Gakuin Univ., Tokyo, wiijima@jm.aoyama.ac.jp),
Prof. Dr. Fa-ti Fan (NYU, ffanffan@gmail.com),
and Prof. Shigeru Nakayama.

Presenters and presentation titles:
Kuo-Hui Chang (Virginia Tech., USA. chang.truman@gmail.com)
"The Co-production of Colonial Politics and Technology: the Japanese Engineering Education in Taiwan, 1920-1945"
Kensuke Abe □currently at National Chengchi University, Taiwan, originally from Kobe, Japan, kouretu2formosa@yahoo.co.jp□
"Development of the Nationalism of Taiwanese Doctors"
Lee Taehee (Seoul National University, thbbong@naver.com)
"The Changing Role of the Central Research Institute in Colonial Korea"
Kim Sung Won (Seoul National University, uniscience@hanmail.net)
"From Korean Apprentice to Entomologist in Nanjing : Cho Pok Sung (□□□) as an Example of Colonial Naturalist"
Oh, Sun-sil (Seoul National University, lailra@naver.com)
"The Transformation of the Electric Power system in Colonial Korea, 1920s-30s"
Miyagawa Takuya□currently at Seoul National University, originally from Kobe University, Japan, tmiyatch@xd6.so-net.ne.jp□
"Japanese Meteorological System and Colonial Meteorology in Early 20th-Century Korea".

(Session Background)

Professor Shigeru Nakayama (b. 1928) worked on the history of East Asian sciences, and was one of the closest friends of Joseph Needham (1900-1995). Among Needham's "men from the East", Professor Nakayama is considered his generation's representative of Japan, and he has enthusiastically encouraged his younger disciples to join his team. He was the leader from the Land of the Rising Sun, one of the 108 heroes under Needham's flag.

Like Needham, Professor Nakayama has been an omnipresent scholar of subjects such as ancient astronomy, mathematics, contemporary STS, medical sciences, techno-scientific institutions, and civic governance of the environment. Needham once commented that Nakayama's merit was his position

between China and the West, that Nakayama's strategic topos of Japan would be a point of break-through in the often polarized tension between the Orient and the Occident, such was the dichotomy of the East and the West.

In honor of the 80-year-old Professor Nakayama, this panel will develop the historian's strategic position in the geographical as well as the political sense. It is therefore our intention to carefully examine the political implications of the history of science. To bridge the gap between East and West, we explore the chasm once made by war and aggression, started by the East (Japan) on its own, armed with techno-scientific instruments from the West.

Professor Nakayama is primarily known as the historian who introduced Western astronomy into Japan, and also for his pioneering contemporary STS-related work, which accompanied Japanese modernization. Among other works, Professor Nakayama worked on Japan's colonial imperial universities for the first time in 1963, and he was a contributing editor of a volume of International Relations (including techno-science in the period of Japanese expansion) on Japanese History of Science and Engineering in 1968. In the field of history of science, the issue of colonialism has long been ignored; only since the 1990s have some historians started to examine this. But we should emphasize that it was Nakayama-Sensei who first discussed this issue in 1963, and he has examined this topic as an important historical issue ever since.

Issues related to Japan's colonialism were not straightforward, nor were they accepted historical research under the political pressure of the Cold War. Professor Nakayama's pioneering work on Japan's colonial science is now regarded as the self-reflective practice of conducting historical research on Japan's own negative aspects of colonialism. To view the history of colonialism, we have no intention of justifying any forms of imperialism or colonialism; we would rather reveal the role played by science and technology. We will continue Professor Nakayama's work on Japan's colonial management, and its relation to techno-science/medicine in Japan's former colonies.

With this in mind, it is therefore right to reflect on Professor Nakayama's former work, and develop his argument, which opened the field. In order to do this, we organized six young history of science researchers from the East Asian periphery: Korea, Taiwan, and Japan. Special thanks must go to Prof. Lim Jong-tae and Prof. Hong Sungook, from Seoul National University, who are working closely with the organizers' research project on the history of science in Japan's former imperial universities. We must also be aware of historiographical problems accompanying Japanese expansion as they relate to the history of "Japanese" science and technology. As such, it was science carried out within the then expanded territories of Japan, but it was the product of interaction between the Japanese and their East Asian neighbors, the colonizers and the colonized. Rather than justifying the concept of "colonial modernization", our intention is to renew East Asian history of science through interaction, as well as mutual and collective production between the West and the East, and among the East Asians, (as it might be called a "co-causal" product in East Asia), and closely examine details that might have been concealed and untouched because of political conflicts.

We hope that this session will provide us with an opportunity to exchange our ideas with wider audiences who share our interests in the history of East Asian sciences. Even though the session will be conducted in English, we will do our best with our Creole, "New East Asian Creole English Language (Neacrel)". The session will not utilize Japanese, the dominant language of the period with which we are dealing. So please join us for this panel, which the conference organizers hope will be "a tribute to a generation", as well as to honor Professor Shigeru Nakayama.

In the first part of this session (Institutionalization of Science and Medicine in Japan's Empire), we deal with broader institutional/political historiography of Japan's colonial science and medicine, and study the

relationship between Japanese colonial policy and institutionalization of sciences in the Great East Asian Co-Prosperity Sphere. Kuo-Hui Chang (Virginia Tech., USA) will first examine "the Co-production of Colonial Politics and Technology: the Japanese Engineering Education in Taiwan, 1920-1945"; Kensuke Abe (currently at the National Chengchi University, Taiwan, and originally from Kobe, Japan) will then present his research project "Development of the Nationalism of Taiwanese Doctors"; and Lee Taehee (Seoul National University) will discuss "the Changing Role of the Central Research Institute in Colonial Korea".

This part will be chaired by Prof. Yasushi Kakihara (Tokyo University of Marine Sciences), and commented by Prof. Dr. Iijima Wataru (Aoyama Gakuin University, Tokyo), and Shigeru Nakayama-Sensei.

Following this, the second part of the session (Case Studies on Japanese Colonial Sciences) will discuss case studies on colonial sciences in Japan, and explore its various implications, such as nationalism, industrialization, and the military. Kim, Sung Won (Seoul National University) will discuss "From Korean Apprentice to Entomologist in Nanjing: Cho Pok Sung (□□□) as an Example of Colonial Naturalist"; Oh Sun-sil (Seoul National University) will present his paper on "the Transformation of the Electric Power System in Colonial Korea, 1920s-30s"; and Miyagawa Takuya (currently at Seoul National University, originally from Kobe, Japan) will examine "the Japanese Meteorological System and Colonial Meteorology in Early 20th-Century Korea".

This part will be co-chaired by Dr. Kim Boumsoung (Tokyo University) and Prof. Dr. Akihisa Setoguchi (Osaka Municipal University), and commented by Prof. Dr. Fa-ti Fan (NYU).

(Abstracts for Part 1)

The Co-production of Colonial Politics and Technology: Japanese Engineering Education in Taiwan, 1920-1945

Kuo-Hui Chang (Virginia Tech., USA)

In 1895, China ceded the island of Taiwan to Japan after the Sino-Japanese war of 1894-1895. The Japanese colonized Taiwan until the end of World War II in 1945. During the fifty years, Taiwan was developed by the Japanese as an agricultural product provider for their domestic needs, and then was transformed to an industrial base in order to help Japan colonize and develop their Southeast-Asia colonies. The Taiwanese, basically, in this traditional perspective of colonial politics, were viewed as an exploited tool for Japan's economic and military necessities. However, where, if any, was the narrative of the ruled, namely the Taiwanese, in this colonial politics? Could the Taiwanese only be narrated from the perspective of the ruler? Was there no narrative from the Taiwanese themselves other than that they, as the ruled, were explained as either the ruler's exploited tool or their rebellious trouble? I will argue that the Taiwanese, the ruled, had played an active political role to stimulate the Japanese to construct engineering education in Taiwan in order to approach modernity. Engineering education, which brought technology into Taiwan, was not only a disciplinary mechanism for the Japanese, but also a vector for the Taiwanese to pursue their modernization. I will demonstrate that if we want to understand the colonial politics in Taiwan, the analysis would be more fruitful if the technological impact was brought into that analysis. The embedded and fragmented technology within the colonial politics will be the issue in this presentation.

Development of the Nationalism of Taiwanese Doctors

Kensuke Abe (National Chengchi University, Taiwan)

Is the role of "doctors" merely to cure illnesses and prevent diseases, or is it also to study new bacteria and find new methods of medical treatment? Indeed, these are the most important professional responsibilities which are imposed on them and also their way of life. However, some doctors were involved with and active in social and political action in Taiwan, such as Jiang Weishui (□□□), Du Congming (□□□) and Li Zhengyuan (□□□), who were influential leaders in Taiwan society in the past. In order to recognize the background and meanings of their social activity, some historical and sociological studies have already been conducted by researchers Luo Mingcheng (□□□), Chen Junkai (□□□) and Fan Yanqiu (□□□). However, the periodical structure of these studies was mostly based on outside factors (mostly divided by the changing of extrinsic governments and World War II). They could not focus on either the development of Taiwanese nationalism, which has been flowing back on these Taiwanese doctors and Taiwan society since Taiwan's modernization to the present day, or the development of individual scales, because the periods of these outside factors were often shorter than a person's life (with the exception of the Qing era, Japanese rule: 50 years, KMT rule: 55 years, and DPP: eight years).
This paper will attempt to review the time structure and point of view of the current historical and sociological studies of modernization of Taiwanese doctors and medicine, and reconstruct its time aspect based on the point of view of Taiwanese individuals and social history from the end of the 19th century to the late 20th century. The author would like to highlight the characteristics of Taiwanese doctors in the modernization period and its influence to the present Taiwanese society.

The Changing Role of the Central Research Institute in Colonial Korea

Lee, Taehee (Seoul National University)

Scientific research institutes in colonial Korea have generally been portrayed as passive organs of Japanese colonialism, which carried out the decisions made by the Government General (□□□□□). This description, however, simplified the complex relationships between the Government General and scientific research institutes. In fact, they often played an active role in persuading the political authority or obtaining the aid of other organizations for their own benefit.
This paper takes the Central Research Institute (CRI, □□□□□) as an example to show the active roles of scientific research institutes. The CRI was the only institute of industrial technology during the Japanese colonial period in Korea. In the 1910s and 1920s, the CRI mainly focused on the research of handicrafts. In the mid-1930s, however, the CRI changed its main research focus from handicrafts to the natural resources of colonial Korea. This shift was not led by the Government General, but by the CRI, which was largely supported by industry organizations in colonial Korea. The Government General took no interest in the CRI and even decided to abolish the agency in 1931 under the pretext that it was obsolete. To overcome the crisis, the CRI began concentrating on natural resources. It stressed the usefulness of natural resources and aimed to attract Japanese enterprises to colonial Korea. From this change, the CRI was developed into the central institute of the industrialization in colonial Korea.
This case shows that the CRI's research activities in the 1930s did not depend on decisions made by the Government General, but resulted from its negotiations with the various actors ― the CRI, industry organizations, and the Government General.

(Abstracts for Part 2)

From Korean Apprentice to Entomologist in Nanjing: Cho Pok Sung (□□□) as an Example of Colonial

Naturalist

Kim, Sung Won (Seoul National University)

This paper examines the early career of Cho Pok Sung (□□□), one of the representative Korean naturalists in colonial Korea. The point is that Cho could develop his career as a naturalist in connection with Japanese imperial expansion. He was trained as an apprentice by Mori Tamezo (□□□) and Doi Hironobu (□□□□), and became an assistant for the preparatory course of biology in Keijo Imperial University (□□□□□□) in 1930, despite his lack of competent professional education. From his collaboration with these Japanese naturalists, Cho extended his research from the insects of the Korean peninsula to those of Manchuria and China, just as many other researchers at Keijo Imperial University did in the late 1930s. As the university became the center of colonial science, Cho could also extend his personal network to Japanese-occupied territories in China.

From 1935 onwards, Cho could work with researchers in the Institute of Scientific Research in Manchukuo (□□□ □□□□□) and other Japanese organizations in China, for his own projects. Some of his research projects were sponsored by Japanese military authorities. In 1942, Cho, the former local apprentice of Japanese naturalists, could be promoted as high as a researcher at Nanjing Museum (□□□□□). At each level of his career, Cho improved his position as a naturalist in accordance with the degree of collaboration he enjoyed with Japanese naturalists. His case illustrates how Korean naturalists practiced in the research environment of colonial Korea.

The Transformation of the Electric Power System in Colonial Korea, 1920s-30s

Oh, Sun-sil (Seoul National University)

In the 1920s-30s, colonial Korea's electric power industry experienced dramatic growth due to the transformation from a local generating system to a nationwide grid system consisting of large-scale plants and high-voltage transmission lines. Consequently, the Korean electrical system became more firmly established in the late 1930s as compared to the Japanese system, which was still based on small- and middle-scale power plants. This paper examines colonial Korea's political-economic context, which made this transformation possible, while focusing on two large-scale hydropower plants as stepping-stones. The first plant, located at the Pujon River, had a capacity three times larger than the biggest plant in Japan. The second plant, located at the Changjin River, became the core of the grid system. This transformation was the product of a negotiation between Nippon Chisso Hiryō (Nitchitu) and the Japanese colonial government. Nitchitu, an electrochemical enterprise, needed abundant power resources; the colonial government had to stabilize the public power system. First, upon failing to get sufficient electricity in Japan, Nitchitu tried to secure new power resources in Korea. Nitchitu's private initiative for expanding its business resulted in the construction of the Pujon plant, which was totally alien to the previous system. Second, the colonial government played an important role in transforming the private plant into an element of the nationwide grid system. Suffering from the resistance of existing power suppliers and the lack of funds, the colonial government chose Nitchitu as an ideal partner. The cooperation between the two made the construction of the Changjin plant possible, which would provide the foundation for the stable grid system.

Japanese Meteorological System and Colonial Meteorology in Early 20th-Century Korea

Miyagawa, Takuya□Seoul National University□

This paper examines how imperial Japan constructed the meteorological system in colonial Korea. Japan started to build the meteorological system in the Korean Peninsula from 1904, when the Russo-Japanese war broken out, and they almost completed the institutional building by the mid-1920s. I will show that the Japanese meteorological system in colonial Korea had the following three important functions for maintaining a colony: practical, ideological, and knowledge-producing. First, practical function - while Japan extended and consolidated its imperial meteorological system in the Korean Peninsula until 1945, it made use of the meteorological data not only for weather forecast, but also for wars, agricultural production, and so on. Secondly, ideological function - by editing the lunar calendar at the Inchon Meteorological Observatory, which was the center of the Korean meteorological system, Japan tried to take over the authority of the former Joseon Dynasty; the calendar had been the symbol of royal power in traditional East Asian cultures. Finally, production of imperial knowledge - a 15-year-accumulation of meteorological data and investigation by Japanese meteorologists gave them comprehensive understanding of the climate of the Korean Peninsula in the late 1910s. By making full use of these characteristics of the colonial meteorological system, Japan was able to make the weather of Korea as a "domestic" issue of the Japanese empire. This study implies that the Japanese meteorological system was an important tool for controlling time and space in colonial Korea.